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SMITHSONIAN

MACHINISTS AND BLACKSMITHS JOURNAL

JOHN FEHRENBACH, EDITOR
CLEVELAND, OHIO.

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OCTOBER, - - - - 1874.

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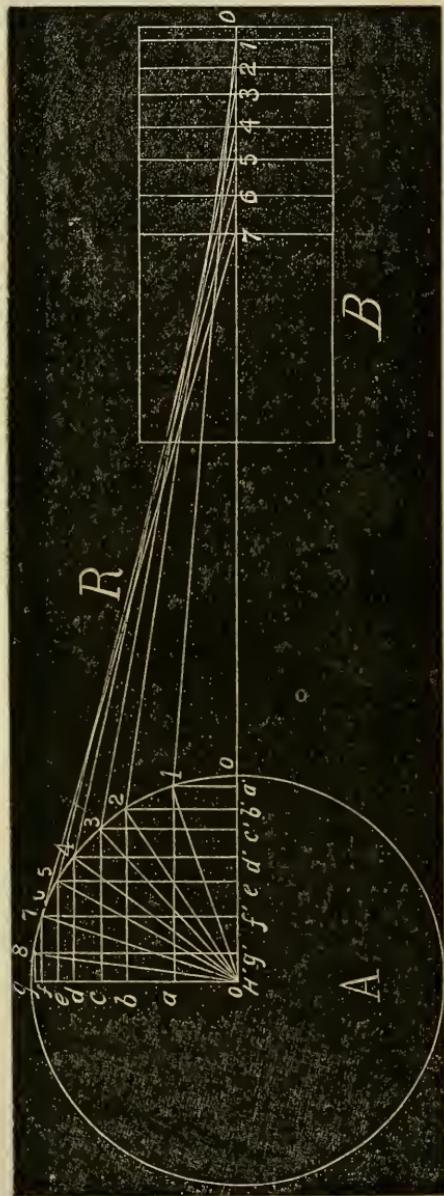
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CRANK LEVERAGE.

[For the Machinists and Blacksmiths' Journal.]

FOR the benefit of those who are not fully posted on the motions of the crank, I will take into consideration its leverage. All who have ever started an engine know that it will not move when the crank is on the center, for the simple reason that the crank and piston-rod and the connecting-rod are all in a straight line with each other, and in this position no amount of steam will make the engine move. And why? Because there is no leverage to the crank, and, therefore, there can be no motion; the piston simply receives the full pressure and remains stationary. But move the crank to the point marked 1 in the diagram and we have a crank leverage of space equal to the distance between *a* and *o*, and the piston in the cylinder will have moved from *o* to 1. Here, it will be observed, the pis-

ton moves very slow compared with the distance that the crank has moved; but, if we continue the movement throughout all the spaces, we shall find, as the crank moves further through the circle it describes, that the piston keeps gaining in speed until at nearly half-stroke when it moves with about the same velocity as the crank. The lines *R* show the different angles of the connecting-rod, together with the space moved through and their relative positions. Thus at *a* it has a leverage of from *a* to *o* with the crank-pin at 1 on the circle and the piston at 1 in the cylinder. Then place the crank-pin at 2 on the circle, and the piston has moved to 2 in the cylinder, and the leverage of the crank is from *o* to *b*, and in like manner through all the other spaces, so that if it is desired to know just how far the piston has traveled, the spaces between *a'* and *o'*, *b'* and *o'*, or *c'* and *o'*, will be the distance the piston has traveled, and the distance in the cylinder will also



correspond very nearly to those marks which are tangent to the circle and 1, 2, 3, 4, 5, 6, and 7, will represent the same distance in the cylinder nearly that $a', b', c', d', e', f', g'$ do on their line in the circle A described by the crank, and as the line R represents the connecting-rod the relative position of the rod will be shown through each division.

Now let us look at the result of the motion of the crank, and suppose we have a cylinder of say 10 inches in diameter and 3 feet stroke (we give it this long stroke for convenience) and assume a pressure of 100 pounds (actual). As the cylinder is 10 inches, it of course contains 78.54 inches in area; therefore if the engine was on the dead-center, there would be simply a dead pressure of 78.54×100 or 7,854 pounds pressure on the cylinder head and the crank-pin, but as there is no motion there can be no more force or effect. But give the piston a motion of 2 feet per minute and we have twice the above in effect; thus 2 feet per minute would give a force of 15,708 pounds, or foot pounds, as they are called in mechanics. Perhaps this may not be clear enough for some of our readers. We will, therefore, explain by saying that if the piston moved with a velocity of only 1 foot per minute

the force would be 7,854 pounds, or foot pounds. Now, if we move with two feet per minute it is evident that we are using twice the amount of steam in one minute that we used before, therefore there is twice the number of foot pounds and twice the work done by the steam, and also twice the quantity of steam used. If we move the piston three feet per minute it is also evident that we use three times the quantity we did in the first place, therefore our area of piston, 78.54, must be multiplied by three, and we have 23,562 foot pounds; but, as before, we have used three times the quantity of steam to do it with.

We have gone on thus far in the hope of throwing a little light on the subject of velocity, because we have seen many incredulous looks when we have been trying to explain that the speed of an engine was one of its exponents of power.

Now let us speed up this engine and run it at a higher velocity and see how the foot pounds will count up. Let us say that 300 feet per minute would answer such an engine very well, but we will first give it 200 feet per minute, in order to demonstrate the rule properly. So that if we run this 10-inch piston 200 feet per minute with 100 pounds pres-

sure we have $200 \times 78.54 \times 100 = 1,570,800$ foot pounds, and if we divide this 1,570,800 by 33,000 pounds we have the horse-power of the engine, which, in this case, will be 47.6 horse-power. Now let us run it up to 300 feet per minute, and we shall find that we are realizing one-third more power with the same pressure of steam, thus $78.54 \times 100 \times 300 \div 33,000 = 70.14$ horse-power. But it must also be borne in mind that we are using more steam by one-third, and, consequently, more fuel to generate the steam; and yet it is not always true that a corresponding amount of fuel is used by increasing the speed of the engine. Nor must it be supposed that a 10-inch cylinder will do the work we have here stated in actual practice with the pressures we have given, because we have made no allowance for friction, or loss by radiation, or by reason of the lap of the valve; all of these things must be taken into consideration in actual practice.

Our object at starting was to show how the speed affected the power of the engine even though the pressure remained the same. In many instances a great degree of economy has resulted from running the engine faster, carrying a higher pressure, and cutting-off sooner. One case espe-

cially occurs to me now, that came under my own observation, of a beam-engine of 44-inch cylinder and 7 feet stroke, which made 24 revolutions per minute, and was replaced by a cylinder of 36 inches in diameter and 7 feet stroke, running 32 revolutions per minute, and carrying 37 pounds of steam—when the 44-inch cylinder carried only 24 pounds of steam. The result of the saving was rather over 25 per cent., with a great deal more even speeds and a greater regularity in running. Nor is this the only case I know of, but as this is one that came under my own supervision I am able to give the exact facts.

In former times—since my own recollection—engines were speeded to run from 160 to 220 feet per minute, and they were considered to be doing very well at that speed; but now 300 and 400, and even up to 800 feet per minute is a fair speed for an engine to travel, and there has resulted great savings thereby, besides making a smaller engine do the work, but of course they are built stronger for such purposes. And since the advent of the automatic cut-off, or cut-off by the governor, we have engines running with the least possible amount of coal. In former times it required from 6 to 7 pounds of coal to develop

one horse-power one hour; now we realize a vast difference inasmuch as we can make agreements with builders of engines who will guarantee to run their engines with 3 pounds of coal per horse-power per hour, thus making a saving, in some instances, of over one-half. And the compound engine is yet destined to do greater things.

If any of our readers will act upon the suggestion I offered in last month's JOURNAL, I shall feel greatly obliged.

J. J. ILLINGWORTH.

THIMBLE MAKING.

The manufacture of thimbles is very simple, but singularly interesting. Coin silver is mostly used, and is obtained by purchasing coin dollars. Hence it happens that the profits of the business are affected instantaneously by all the variations in the nation's greenback promises to pay. The first operation strikes a novice as almost wicked, for it is nothing else than putting a lot of bright silver dollars fresh from the mint, into crucibles and melting them up into solid ingots. These are rolled out into the required thickness, and cut by a stamp into circular pieces of any required size. A solid metal bar of the size of the intended thimble moved by powerful machinery up

and down in a bottomless mold of the outside of the same thimble bends the circular disks into the thimble shape as fast as they can be placed under the descending bar. Once in shape, the work of brightening, polishing, and decorating is done upon a lathe. First, the blank form is fitted upon a rapidly-revolving rod. A slight touch of a sharp chisel takes a thin shaving from the end another does the same on the side, and third rounds off the rim. A round steel rod, dipped in oil and pressed upon the surface, gives it a lustrous polish. Then a little revolving steel wheel, whose edge is a raised ornament just outside the rim. A second wheel prints a different ornament around the center, while a third wheel with sharp points makes the indentations in the lower half and end of the thimble. The inside is brightened and polished in a similar way, the thimble being held in a revolving mold. All that remains to be done is to boil the completed thimbles in soap suds, to remove the oil, brush them up and stock them for use.

PRACTICAL VALUE OF THE GOVERNMENT BOILER EXPERIMENTS.

The only interest the practical engineer can have in these experiments is to verify or otherwise his own calculations on the strength of material put into a given form. Here his interest ends. Practical men know that above all other things pertaining to steam and steam engines, the boiler is subject to so many contingencies that no laboratory experiments can be of much value.

When the boiler has only to supply a given amount of steam, flowing freely and regularly through an orifice, and this steam is made from pure water, the most favorable circumstances for steam production exist. But this is seldom the case; the water, as a rule, is impure, making scale, or perhaps the water is salt, which is worse.

Then, if the boiler supplies a steam engine, the flow of steam is intermittent, producing what is known as pulsation, the sides of the boiler pulsating or springing out and in at every stroke of the engine, this motion tending to the destruction of the boiler, and being aggravated by the modern practice of carrying high steam and cutting-off short. This pulsation of course seeks the weakest point; and there always is one such point.

Now, after a lapse of ninety-odd years, it has been discovered that spitting on the bait doesn't help in the least to catch the fish. Is there any one in America who isn't as mad as blazes?

The water may be what is called pure, forming no incrustation, yet contain an acid that imperceptibly erodes the iron; and should there be another metal, like copper or brass, in contact with the iron, the boiler may be destroyed by galvanic action. This latter is most dangerous because insidious and not generally apprehended, reducing a portion of the boiler to a thinness that is only revealed when it gives out.

Foaming takes place sometimes and requires skill and experience to manage it.

A most pernicious practice is to use an open heater, by which all the oil or tallow used is pumped into the boiler, its action being in the highest degree deleterious, and, with a fire-box boiler, dangerous.

Another and too common practice is the introduction of the feed-water into the lowest part of the boiler, especially if it is of the locomotive type or a fire-box boiler. The writer of this article examined two boilers of the locomotive type, rated at 45 horse-power each. The boilers had been but six months at work before they were ruined and ruptured in their fire-boxes by introducing the feed water in the leg below the fire grate. There was no fault of construction or material. The fire-boxes were made

of three-eighth best Pennsylvania iron, and thoroughly stayed with three-quarter screw-stays at the angles of each; yet in six months the plates of the fire-boxes were destroyed.

Another fruitful source of destruction of boilers is small leaks in rivets or seams; nothing apparently when considered with reference to loss of steam or water, yet corrosion takes place, which, if not arrested, eats away the plate, and finally a patch is required.

Another cause of premature destruction of boilers is the inequality in heat to which a boiler by its construction or setting, or perhaps both, is subjected, expanding one part, while the other remains comparatively cool.

Another and very common way of destroying boilers is to blow them off hot with a hot furnace of brick around them, and then fill them with cold water.

Another is the forcing of a boiler to double its legitimate capacity.

Unfortunately, too many boilers are placed in the care of men wholly incompetent; if they can shovel coal and get steam enough for the time being, they and their employers are too often satisfied.

With all these sources of danger, though a boiler may have

withstood such tests as may be recommended by the commission conducting the Sandy Hook experiments, it may be asked, what security have we? The competent engineer will affirm that the only safety lies in vigilance; that boilers ought often to be inspected by an expert; and that his directions should be followed to the letter. He finds safety valves overloaded, steam gauges incorrect, and other appliances, ostensibly for safety, not safe at all; sheets blistered or corroded when all was thought to be right and safe. The boiler was undoubtedly safe once, but not now. If an explosion takes place, is it mysterious?

With a good safety valve, good gauge cocks, correct steam gauge verified four times a year by an expert of the Hartford Steam Boiler Inspection and Insurance Company, with thorough inspection of the boiler by the same expert, and a reasonably competent and careful attendant, there need be little fear of explosions.

It was, we think, the eminent scientist, Sir William Thomson, who asserted that the safety in the use of boilers depends not upon their strength, but upon our knowledge of their condition, which enables us to guard against overtaxing them.—*The American Artisan.*

ELECTRICITY ON RAILROADS.

The French have lately introduced a system by which a stationary electric battery is made subservient to blow the whistle of an approaching locomotive, in case the road is not clear, without the engineer having to give any attention to it. Such an arrangement is of course exceedingly valuable at night, and especially during a fog, when signals cannot be seen at a distance. It is the reverse of the system introduced on our Hudson River railroad, by which every approaching locomotive sets a stationary electromagnetic alarm bell at the depot in motion. In the French system referred to the obstruction at the depot starts the steam whistle on every approaching locomotive when the train is still far enough away to slacken speed and stop. It has now been in successful operation for a year on the line of the Northern Company of France, informing the engineer whether the way is clear or not. The signal tender turns a disk and sends an electric current in the direction of the coming train to a bar placed between the rails; when the engine reaches the spot, a metal brush, placed between the wheels, sweeps the bars, the current passes to the engine, and, by means of an electro-magnet, presses upon a lever which opens the steam whistle, thus making it blow automatically.

Editorial.

THE ENLARGEMENT OF THE JOURNAL.

Our readers will no doubt be pleased at the announcement that the JOURNAL hereafter will be enlarged to more than double its present size. The first number of the enlarged JOURNAL will make its appearance on the first day of January, 1875. It shall be our aim to make it not only a credit to the organization, whose official mouth-piece it is, but a benefit to our members, as well as a reliable source of first-class scientific and literary information to its readers.

The subscription price remains as heretofore, \$1.00 per annum in advance. This will make it the cheapest mechanical work published in the world. Aside from its being a mechanical publication, it shall be an index of the most accurate and reliable character to the state of trade throughout the country. We shall publish monthly a review of the labor market throughout North America. Having Unions located in every important city in the country we shall be able to obtain information concerning the state of trade and the condition of our mechanics, their wants and necessities, more readily and accurately than it is possible for any other

paper to do. We mean to become fully acquainted with the wants of the men in whose immediate interest it is published, and leave nothing undone to secure to them all the advantages accruing from their valuable services.

The JOURNAL shall advocate constantly, persistently and most earnestly the payment of a fair day's wages for a fair day's work. It shall discourage strikes, and seek the elevation of the laboring class in another and better mode, one less suicidal and disastrous in its effects. Instead of advocating strikes as a remedy for the ills to which labor is heir, it shall advocate and insist upon the removal of the evils that make strikes a necessity, believing that through organization alone can working-men find protection against the frauds and impositions constantly practiced upon them. Hence it shall be our constant endeavor to keep before the machinists and blacksmiths of America that greatest desideratum and cornerstone of their safety and success, ORGANIZATION.

In order, then, that the JOURNAL may accomplish its mission its circulation must extend to every city, town, village and hamlet in the land. It must be made to find its way into the home of every machinist and blacksmith upon the American continent;

and instead of publishing, as we have heretofore, less than 6,000 copies monthly we should publish hereafter not less than 30,000 copies. If every member on the books of our organization would subscribe, as it is his duty to do, and get at least one more beside himself, we would be able to issue monthly in the neighborhood of 35,000 copies.

Members when canvassing for the JOURNAL should bear in mind that the JOURNAL is not a private enterprise, but that it is the organ and mouth-piece of the Machinists and Blacksmiths' Union of North America—a publication in which every member is an equal share holder. It is, therefore, the duty of every member to work earnestly and diligently to increase its circulation, and thus increase its power for good, and assist to make its mission a complete success.

A paper stands in the same category as a public speaker or lecturer. No matter how sound, logical, true and convincing the arguments proceed from the rostrum—without an audience—they fall discouragingly and without effect upon the empty chairs that stare the speaker so coldly and blandly in the face. This is true of a paper with a limited circulation; Its mission for good is greatly impaired. But give it a

circulation, where the people can be reached, and a marked change for the better can be immediately seen. We therefore ask our members to get up clubs in every machine and blacksmith shop under our jurisdiction, and endeavor to swell the subscription list of the JOURNAL to 50,000 by the first of January. Let us vie with each other in this matter, and let no member shirk the duty he owes to his organization. Each should bear in mind that our organization will be just what we may see fit to make it, nothing more nor less. We must not expect to accomplish any good in this world without labor. Therefore let each individual member go earnestly and immediately to work, supply himself with a subscription list and begin a thorough and vigorous canvass in his respective locality. We should not confine our labors to machinists and blacksmiths exclusively, but get everybody to subscribe. Let each member send in at least six new subscribers. If that is done the organization will be made self-sustaining, and our Subordinate Unions will be correspondingly benefitted. Who among our members is going to send in the largest list of subscribers to begin with the first number of the enlarged MACHINISTS AND BLACKSMITHS' JOURNAL?

WHO IS TO BLAME?

We hear a great deal about the tyranny and oppression of capitalists, and the encroachments of these men upon the rights of the laboring classes. Every little upstart in the labor movement takes that theme as his first lesson, and learns to chant the old, threadbare song as an argument in favor of down-trodden and oppressed labor. That capitalists very often need handling with some severity we do not dispute; but to keep up a continual vilification of these men without proposing or even suggesting a remedy for the ills to which the laborer is heir, we hold is not conducive to the interest of any class, much less those whom it is intended to benefit. Workingmen should bear in mind that the men against whom the tirade of the incipient reformer is directed, are but the creatures of a system which exists only through the toleration of the workingmen themselves. This system creates two separate and distinct classes, one of which is enabled to appropriate to itself the surplus earnings of the other, and share largely, and often extravagantly, in the world's luxury, while the other contents itself on the bare necessities of life, and lives only through the practice of the most

niggardly economy. The children of the one class enjoy all the privileges of our common and high schools, colleges and universities, while the children of the other are compelled, through the poverty of their parents, to go into the workshop, in many cases before they have mastered the alphabet.

When men have the remedy within their own hands to free themselves from oppression, fraud and imposition, they alone are to blame if they fail to apply it. In a country such as ours, where the sovereign will of the people expressed through the ballot box, becomes the law of the land, workingmen united are invincible. But as they are at present constituted, surrounded by their prejudices and petty jealousies it is impossible to unite them upon any question having in view their emancipation and amelioration.

The time has come for us to speak plainly, and we assert boldly, without the fear of successful contradiction, that the miserable and almost hopeless condition of poverty, serfdom and slavery, the subserviency and dependency of workingmen is due to their own inactivity, gross, culpable negligence, and deeply-tainted petty jealousies. While laboring under such conditions,

and being surrounded by such circumstances, it is not in the power of man to alter or improve the moral, mental or social status of the laboring classes. So long as this incongruity exists among them it will be an utter impossibility to unite them upon any question looking to their advancement. The leaders in the labor movement are as much to blame for this sad condition of affairs as the rank and file of labor's mighty army. If these men, instead of waging war upon men who take advantage of a system created and continued by and through our own tolerance, would point out the short-comings and educate workingmen to a proper use of the means which God placed in their possession, the liberation of the toiler from the thraldom of oppression would be but a question of brief time. If the inactivity and negligence of workingmen were pointed out, and they were given to understand that their salvation depended upon their own individual exertions, their situation of hardship and poverty would soon be changed to one of independence and comfort. But so long as workingmen are their own worst enemies it is the sheerest nonsense, and the merest demagoguery, to prate about the tyranny and oppression of capital. Let the great body of our working

people combine and lend a helping hand to the few who are laboring zealously for the liberation of their fellow-toilers, and they will be entitled to the consideration of every true lover of liberty and freedom. But so long as they stand aloof, and, by their silence and inactivity, permit—in fact induce—men of capital to encroach upon their rights, they need expect no privileges and no remunerations other than those which capitalists in the dispensation of their magnanimity may chose to give them. Aside from this there is hardly an effort made to better the condition of the workingmen that is not defeated by the very men whom it is intended to benefit. Let employers reduce the wages, no matter to what extent, and there will always be enough to take the places of those who may refuse to accept the prices offered. Thus it will be seen that it is not so much the employer who reduces the wages as it is the workingmen themselves.

One thing more than all else that keeps workingmen in subjection and poverty, is the petty jealousy which seems to be inherent in their very natures. Let one of their number have a prospect for promotion, and a hundred are ready to cling to his garments to drag him down. A

man may squander a fortune and spend the best years of his life in their interest, and his only reward will be one of ingratitude. If any one wishes to ascertain the truth of these assertions, or test the sincerity of workingmen, let him secure the nomination for some petty political office of some workingman — one whose whole life has been devoted to the interests of his fellow-coilers—and then secure the nomination on the opposite ticket of some petty-fogging political trickster and ward bummer, who never raised his voice or moved a finger in the interest of labor, and if he is not convinced by the time the ballots for both these men are counted, we simply advise him to spend a fortune in the interest of workingmen, and then run for office in opposition to a life-long open and avowed enemy of labor, and we feel quite certain the conviction will be deeply impressed upon the tablets of his memory. In addition to rewarding him with defeat and their enemy with victory, he may consider himself lucky if he escapes the torments of hell and everlasting damnation which would certainly be inflicted upon him if their ungrateful curses would have any effect on the condition of man in the other world..

It must not be supposed from

what we have written that we place all workingmen in the same catalogue; not by any means, as there are many among them who are as true-hearted, noble and generous as ever breathed the breath of life; men who are ever ready to respond promptly to the calls of duty, and who will shirk no responsibility but move steadily forward with the redemption of labor as their guiding star. Would that we could say as much of the great majority of workingmen; with pleasure would we herald it broadcast throughout the land. But when we cannot we propose to tell the truth though the heavens fall. The best way to correct a failing in men is to point out and not cover up their deficiencies. This we propose to do, and, as we have no enemies to please and no friends to reward, we propose to make it interesting for those whom we shall endeavor to bring beneath the scorching rays of public scrutiny. And if we do not accomplish our mission it shall not be for a lack of pluck or true manly courage. We shall leave nothing undone to correct the evils that exist among workingmen; neither shall we shirk from any responsibility when necessary to correct wrongs, frauds and impositions, when practiced upon them by capitalists. But we hold that wherever such is tolerated workingmen have only themselves to blame.

THE PRINCIPAL CAUSE OF STRIKES.

We call the attention of our readers to an article taken from a Troy, N. Y., paper, entitled "The workingmen and the employers," which will be found on another page. The article is so exactly in accordance with our views, that we publish it entire, and heartily commend it to employers throughout the country.

Although strikes have been of frequent occurrence within the past eight years, and particularly within the past year, very few workingmen can be found who favor strikes as a remedy for the removal of any wrong. The action of the employers and their treatment of their men, is the cause of ninety-nine strikes in every hundred that take place in this country.

It is generally conceded that nearly all strikes are caused by an attempt on the part of the employers to reduce wages or an effort on the part of the employees to raise them. There are three things that contribute greatly toward the action of employers to reduce wages. One is a greedy, grasping, avaricious disposition on the part of many to squeeze the last drop of blood out of the poor workman, and turn it into filthy lucre. The bone, muscle, health, body, and

even soul of the laborer in many cases are sacrificed in an inglorious and contemptible struggle for bare existence, while the men in whose interest these sacrifices are made, live in princely palaces, and gloat over their colossal fortunes ground out of the bodies and souls of the down-trodden and oppressed laborers. If men of wealth were a little more charitable, and would content themselves on smaller dividends, strikes would be of less frequent occurrence, and they would be made better for it.

Another thing which contributes largely to increase the frequency of strikes, is the unfair competition to which employers are subjected. This condition of affairs is caused by the employers themselves. They alone are responsible, for the reason that there is no organization and no unity among them. If they had an organization such as the intelligence they represent would warrant, they could establish a fair living price at which their manufactured products would be sold. Instead, however, they have no organization and no concert of action, except so far as the oppression of their workmen and the reduction of their wages is concerned. Upon these two things they seem to be a unit.—"Crush the workman" seems to

be the battle-cry. "Pull him down and trample him under foot," seems to be the motto.

Another reason why strikes are so frequent, is the refusal on the part of the employers to negotiate with their workmen. In the event of a contemplated change in the price of labor, a contemptible and very often insulting notice is made to disgrace the walls of the shops, in which the men are informed that on and after a certain date their wages will be reduced. No further explanation is given, except, perhaps, that at the bottom of the notice can be read the words, "*If any of the workmen are dissatisfied with the prices offered, they may call at the office and get their discharge.*" And this is the treatment they receive after laboring for the enrichment of their employers and placed them in comfortable circumstances. Is it any wonder under such circumstances that men endowed with honor and manhood should rebel against such barbarous and inhuman treatment? Is it any wonder that the spirit of holy indignation should fire their bosoms and incite them to strike against an innovation of their rights? Let employers treat their workmen as they would like to be treated themselves were they similarly situated, and strikes will soon be

numbered among the barbarous relics of the past. Let them negotiate with their men; arbitrate all questions in dispute; be satisfied with a fair profit on their investment; pay a decent price for labor, and our word for it, strikes will seldom occur.

OUR VINDICATION.

We publish below two articles taken from the Cleveland *Morning Leader*, which fully vindicate our character against the harsh criticisms of that paper in the past. We are now fully convinced that the editor of the *Leader* labored under misapprehensions and acted entirely upon representations made by men who willfully and maliciously placed us in a false and undeserved light before him. We are satisfied from his willingness to make the *amende honorable* that he intended no injustice, but that the accusations of the *Leader* were based entirely upon information received from men whose sole aim was to blacken our character and bring our organization into disrepute. The accusations of the *Leader* continued until they became unbearable, when we engaged legal advisers and through them demanded a retraction. This the *Leader* refused to make, as the editor believed the articles written against us to be true,

whereupon we commenced suit for libel against the Leader Printing Company, laying the damages at \$25,000. This caused an investigation on the part of the company; and after eight weeks enquiry and search it failed to produce even the slightest proof. Seeing that injustice had been done us, the president of the company and editor of the *Leader* expressed his willingness to do what was fair and honorable in the matter, and as we simply asked for a vindication of our character, he readily acquiesced in our proposition, and accordingly published the following articles:

MACHINISTS & BLACKSMITHS IN COUNCIL.

The fourteenth convention of the International Union of machinists and blacksmiths met yesterday in Louisville. The meeting was addressed by Mr. John Fehrenbatch, president of the association, in a speech, the more important points of which will be found on an inside page of this morning's *Leader*. We invite attention to Mr. Fehrenbatch's address with the more pleasure because we have had a very sharp controversy with him in times past, and we find upon examining his views, as set forth by himself, that we have misconceived him and done him unintentional injustice. We can therefore most cordially say that we are gratified to find that we have been in error, and that most of the opinions advanced in his oration we can heartily endorse.

On one occasion, in the midst of the depression following the panic of a

year ago, a dispatch from Mr. Tillinghast, superintendent of the New York Central railroad, represented Mr. Fehrenbatch as originating a strike among the engineers of that and other eastern and western lines. Relying upon the accuracy of that information, the *Leader* in common with several other newspapers, felt impelled to speak of Mr. Fehrenbatch in terms of no ordinary severity. Subsequent events led us to doubt whether Mr. Fehrenbatch had really played the part in that affair which had been ascribed to him, and on application to the author of the dispatch above alluded to, we have failed to receive any satisfactory explanation or confirmation of its truth. We therefore conclude that the dispatch referred to was untrue and placed Mr. Fehrenbatch in a false and undeserved position.

The address of Mr. Fehrenbatch before the International Union yesterday, places him in a light so different from that in which he has hitherto been regarded, that we feel bound to give him the benefit of his own words upon questions wherein we have hitherto criticised his course. Besides being an able address, as considered from the standpoint of the workingmen, it is replete with some of the best deductions of industrial experience.

That part of the address most important to the general public, is the one in which the speaker considers the questions of (1) industrial legislation, (2) the apprentice system, and (3) strikes. On the first of these topics Mr. Fehrenbatch says:

"I, therefore, cannot too strongly impress upon you the necessity of carefully avoiding all legislation that will tend to further disturb the relations of capital and labor. I am aware that the men you represent have suffered much during the past year, and feel as though

some measure for their relief should be adopted by this convention; but we must be particularly careful so as not to bring on a conflict with our employers, as they have, as a general thing, been common sufferers with us. In my opinion a radical cure would only bring on a relapse of the disease. Let your legislation be so shaped as to convince our employers that our organization holds no hostility toward them, but that we seek to elevate our class in a manner detrimental to no other class of our fellow beings."

This, as one must see, is fair and in a proper spirit. Of the apprentice system, as managed by the various Trades' Unions, he says:

"I am of the opinion that some of our Trades' Unions make a great mistake when they undertake to regulate the number of apprentices that should be employed at their respective trades. Nothing can work more injury to a body of men than an attempt on their part to abridge the right of any boy to educate himself in whatever mechanical calling he may see fit to choose. The number of apprentices should be regulated by the wants, tastes and necessities of those wishing to acquire a trade, and not by any combination of men."

This is precisely the doctrine for which the *Leader* has all along contended in opposition to the narrow policy which would restrict the right of American boys to learn trades, a policy which has to a great extent left the employers of this country dependent upon foreign countries for their supply of skilled labor. Coming to the vexed and troublesome question of strikes among workingmen, Mr. Fehrenbatch takes this liberal and intelligent ground:

"Many of our Trades' Unions, in a well-meaning but mistaken view of what they considered their true inter-

ests, have spent much of their valuable time in the enactment of legislation merely to support their members successfully in the most disastrous of all modes of redress—strikes. I sincerely hope that you will not fall into the same error, but that your every effort will be directed toward the adoption of measures for the removal of the evils that make strikes a necessity. * * * * So long as the present order of things exist there can be no lasting peace between the man who buys and the man who sells labor; so long as it is to the interest of one to buy labor as cheap as possible, and to the interest of the other to sell his labor as dear as possible, there will exist an antagonism of interests that all the political economists in the world cannot harmonize."

It is because there has been too little of this kind of talk among the leaders of American Trades' Unions that they have fallen under the suspicion and distrust of so large a class of our people. It is the leaders of our Unions who can deal directly and effectually with these evils, and when we find a man in the chair of one of the largest and strongest associations of workingmen in this country speaking as calmly and logically as Mr. Fehrenbatch has done in his address of yesterday, it is not merely an act of justice but a pleasure to give his words the utmost prominence, and the fairest endorsement.—*Cleveland Leader, Sept. 18, 1874.*

The *Plain Dealer* has several times made sneaking insinuations to the effect that Mr. John Fehrenbatch had received in some way from the *Leader* some compensation for the withdrawal of his suit against this paper. So far as concerns the *Leader* the insinuations are too trifling and contemptible to be noticed. Any one who knows anything about the *Leader* knows that it is not in

the habit of buying the good opinion or the forgiveness of any one. Inasmuch, however, as the *Plain Dealer's* charges may be construed by some to the discredit of Mr. Fehrenbatch, we wish to say simply that he never asked or received one penny of compensation, nor was any such contingency ever mentioned. He desired the vindication of his character against some harsh criticisms of the *Leader*, and demanded through his attorneys a retraction. This was refused on the ground that we believed the charges to be true. He insisted that they were untrue, and upon our seeking to verify the information upon which the charges had been based, our informants failed to substantiate their previous testimony. While the investigation was in progress, Mr. Fehrenbatch delivered his address before the Machinists and Blacksmiths' Union at Louisville. That speech was so sound, and so exactly in accordance with our own position as opposed to strikes and in favor of the freedom of apprenticeships, that the *Leader* published it, and thereby aided to set him right before the public. This is the whole story as we stated it at the time. The superintendent of the New York Central railroad telegraphed last winter that Mr. Fehrenbatch was forming a strike of engineers on his line. Upon that information we wrote an article charging him with conspiracy. It subsequently appeared that Mr. Fehrenbatch was in the city at the time, and the superintendent failed to show that he had any other basis for his telegram than mere rumor. Upon this statement of the case we simply did what we deemed just to Mr. Fehrenbatch, without any reference to any litigation or other consideration.—*Cleveland Leader, October 12, 1874.*

WORK OF THE CONVENTION.

One of the most important conventions ever held by the International Union has just completed its labors, and its members have separated for their respective homes, carrying with them the utmost good feeling and encouragement. The labors of the convention have been of such an important character that we do not hesitate in the least in saying that all we need now to insure the complete success of our cause will be the dispersement of the dark clouds that overshadow the producing masses of America.

One of the greatest deficiencies in our organization has been remedied and a safe-guard provided. Heretofore the term of office expired with the election of a successor; this placed the officer in full control before he had furnished a bond, or even signified his intention so to do. This same deficiency came very nearly destroying our entire organization. Many of our members remember with sorrow and regret the memorable struggle of 1866, in which the life of our organization was involved, and how the number of our Unions was reduced from eighty-four to a weakly and sickly organization of twenty-two Unions. All this was brought about by the deficiency in our laws in permitting an International officer to assume the duties of his office before he had furnished a bond for the faithful and trustworthy performance of his duty. This same officer not only positively refused to attend the convention of the International Union succeeding his election, but actually kept and refused to deliver up the books, property and money in his possession, and to this day the organization has not received a penny from him. In addition to robbing and plundering the organization a breach was created and an attempt made to prevent the holding of the convention as prescribed by the

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constitution. This, however, can never occur under the laws enacted by the Louisville convention, as the term of office hereafter does not expire until the first of January after the election. In the meantime the newly-elected officers—those required to give bonds—must have filed an acceptable bond with the Executive Board; a failure on their part to furnish such a bond will disqualify them from holding office. In addition to this provision the bonds of the President have been increased to \$5,000, the First Vice President to \$1,500, the Secretary to \$1,000, the Treasurer to \$6,000, and that of the Secretary of the Insurance Department remains at \$1,000, making a total of \$14,500. The office of Secretary has been made an elective one, and the First Vice President has been stationed at the International office; executive powers have been conferred upon him which he can exercise during the absence of the President.

It has been made the duty of the President to remain in the field as much as possible as an organizer and lecturer. This mission has fallen to our lot, and although a very disagreeable task, one surrounded by more perplexities, discouragements and hard labor than it is possible for one who never had a trial to conceive, nevertheless we are confident of success; all we ask is the sympathy, encouragement and assistance of our members.

It has been made the duty of the Executive Board to meet in the Executive office, on the third Wednesday in September of each year, excepting the year in which the Union holds its convention, and to audit the accounts of the officers and to publish a financial statement to the organization. If a defalcation is found in any office the Board shall have power to call a special convention of the organization, for the purpose of trying and passing judgment upon the de-

faulting officer. They shall also have power to submit amendments to the constitution to a popular vote of our members. If two-thirds of all the members who vote shall vote in favor of the proposed amendment it shall become a law. The Executive Board also constitutes a board of appeals, and shall decide all questions of dispute between the President of the I. U. and subordinate Unions. All appeals must take the following course: First, an appeal must be submitted to the Deputy of the Union, from him to the President of the I. U., from him to the Executive Board, and from the Board to the convention of the organization, which decision shall be final. No appeal can be legally taken except in strict accordance with the foregoing.

The alteration made in the per capita tax—increasing it to eighty cents per year—was one of the wisest acts of the convention. The I. U. will now be enabled to pay the sick benefits of members of Unions unable to pay. It is also stipulated that there shall be no sick benefits paid to members of Unions not clear on the books of the I. U. This law is interpreted that a Union must be clear on the books of the I. U. for the term previous to the one in which the sickness occurs. To illustrate: If a Union is indebted to the I. U. on the first day of July, 1875, and fails to pay its indebtedness within two months after the expiration of the term, its members will be entitled to no sick benefits for sickness contracted between the expiration of the second month and the date of payment of its indebtedness. To illustrate further: No Union shall be entitled to sick benefits from the I. U. for sickness contracted after the expiration of the two first months succeeding the expiration of the terms ending on the 30th of June and the 31st of December unless the indebtedness of such Union is paid previous to the oc-

currence of such sickness. In other words, a Union will not be considered in arrears until the expiration of two months after the end of the term; then its members will be entitled to no benefits for sickness contracted after that time, unless such sickness is contracted after the indebtedness of their Union is paid. To illustrate still further: In case a Union should neglect to pay in full its indebtedness to the I. U. until the first day of October or the first day of April, the members of such Union would not be entitled to benefits for sickness contracted during the months of September or March. It must be understood that this law applies only to Unions whose membership is insufficient to pay sick benefits after paying its running expenses. The law gives to the President of the I. U. supervision over all Unions; he is empowered to determine whether or not a Union is extravagant in its expenditures. If, in his opinion, a Union is extravagant he must order such Union to economize, a failure on the part of any Union to obey will subject it to a forfeiture of all claims on the sick fund of the I. U. It is, therefore, the duty of all our members to see to it that their respective Unions not only economize but promptly pay this indebtedness to the I. U. at least before the expiration of two months after the end of each term. If this is done there will be no trouble, as we are determined to carry out strictly every provision of the law.

The convention has also made it unlawful to recognize a traveling member without a clear card, properly signed with the seal of the Union attached. To come within the provisions of the law no card is clear unless the card is paid in advance of the date of its presentation. For example: A member who contemplates traveling leaves the locality of his Union on the first day of January, 1875, and pays his dues for the

months of January and February, for which he receives credit on his card; that card becomes an expired card on the first day of March, and cannot be recognized by any Union or member of the organization, unless the owner of the card, in the meantime, has paid more money on his card, in which case the card will not expire until the expiration of the time covered by the payment of dues.

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ADMISSION OF STEAM BOILER MAKERS AND PATTERN MAKERS.

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For the second time in the history of our organization this important question has been ordered by the convention to be submitted to a popular vote of the organization. Two years ago a popular vote was asked upon the admission of steam boiler makers to membership, when not one-fourth of our members voted upon the question. We sincerely trust that such will not be the case this time, but that every member will turn out on the night of election and vote either for or against the proposition. The vote will be taken on the first meeting night in December; if taken at any other time it will not be valid. The members will vote on the following resolutions, and the Corresponding Secretary will transmit the result to this office on the same night:

1. *Resolved*, That we favor the admission of steam boiler makers to membership in our organization.

2. *Resolved*, That we favor the admission of pattern makers to membership in our organization.

The vote must be taken separately on each proposition, and the number voting both for and against carefully noted down. Let us have a full vote.

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During the long winter evenings, brother, you will need something to read; therefore subscribe for the enlarged *JOURNAL*.  over your \$.

MONTHLY REPORTS FOR THE JOURNAL.

Hereafter the monthly reports will have to contain different information than they contained heretofore, as they must be brief and to the point. Each Corresponding Secretary is required to report the exact condition of trade in each shop within his respective jurisdiction; the kind and amount of work done in each shop; the prospects of trade; the number of men employed; the number of apprentices; the cost of living, including house rent, board, etc. Secretaries are requested to be as concise as possible, and report nothing except what they know to be actual facts. It will be the aim of the editor to make the "State of Trade" reports a source of accurate information. The rates of wages will be published in card form and each Union will be furnished quarterly with a corrected list. All vacancies should be secured for members of our organization, and in case a member can not be had in the immediate vicinity of the city or town in which the vacancy occurs, a telegram should be immediately sent to the Executive Department, stating wages paid and kind of workman wanted. All such telegrams can be left at telegraph offices during the day or evening and sent as half-rate messages. All such messages will reach the Executive Department on the day following. Let every member exert his best endeavors to make the Intelligence Department of our organization both effectual and beneficial. Aside from the "State of Trade" reports Corresponding Secretaries are requested to write separate communications of interest concerning their respective localities for publication in the JOURNAL, under the head of "General Correspondence." Let all try to make the JOURNAL edifying, interesting and beneficial. Let us concentrate *all* the interest in that publication and make it one of the most valuable

channels for scientific as well as literary information published upon the American continent. In addition thereto, let every member of the organization constitute himself a committee—an agent—to solicit subscribers, not only among men of our own craft but among others. Let us get our grocery man, dry goods merchant, clothier, in fact every body we patronize to patronize us by subscribing for our journal. If we patronize them we think they could do no less than patronize us by subscribing for our journal. With a membership as large as ours we should be able to increase the circulation of the JOURNAL at least ten thousand by the first of January, particularly since it will be enlarged. We shall have a limited number printed for the first issue, and those wishing to get and keep a complete file should send in their orders as soon as possible.

INDUCEMENTS TO SUBSCRIBERS.

The best inducements we can offer to our subscribers, are these: The JOURNAL shall be just what its supporters choose to make it. If they desire to see its pages replete with fine engravings to illustrate valuable scientific articles, all they need do is to swell its subscription sufficient to warrant such an expenditure. If the machinists and blacksmiths of America will give their organ the support it merits, we have no hesitation in saying that it will be made the most interesting, complete and valuable mechanical work published in the world. Therefore let each subscriber constitute himself an agent to canvass for it. All expense for postage, post office orders, etc., may be deducted. Let us see who will send in the largest number of subscribers to begin the first number of the enlarged JOURNAL. The first number of the enlarged and improved paper will be published January 1, 1875.

PASSING EVENTS, NEWS, ETC.**New Unions.**

By Deputy President, H. E. Easton, No. 6 of Iowa, at Cedar Rapids, with the following as charter members: Pres't., James Mahern; Vice Pres't., Theodore Stevens; Rec. Sec., Allan McDuff; Cor. Sec., Thomas E. Foley; Fin. Sec., James Lawler; Treas., Wm. Mallahan; Cond., Wm. Halliday; D. K. James Bird; Henry Smith, Griffith Spakman, John Kershaw, Jas. Logan.

Bro. Easton desires to return his sincere thanks to all the new members and to Bro. Foley in particular, for valuable services rendered and courtesies extended. In this connection we desire to extend our thanks to the officers and members of Div. No. 159 B. of L. E. for the gratuitous use of their hall in organizing the new Union, and for other favors shown, all of which we promise to remember and reciprocate should ever opportunity present itself.

From the description of the men who compose the new Union, we can safely predict a fine, prosperous and substantial organization. In conclusion, we congratulate them on their accession to our ranks, and bid them a hearty welcome.

As for Bro. Easton he needs no introduction or commendation; his labors in behalf of our organization speak louder than language can in his behalf. All we can say is, give us more Eastons and we will have more Unions.

Anonymous Communications.

"H. C. L." of Chicago, and "H. M. D." of Rochester, will notice by the standing announcement at the head of general correspondence, that all letters intended for publication must be accompanied by the full name of the writer. We pay no attention to anonymous communications.

The Late Wm. Rowntree.

Brother William Rowntree is dead. He was called from our midst on the morning of the 30th of September, 1874. His suffering was great but of short duration; his death was unexpected and untimely, occurring in the midst of a life of usefulness. Just as the fruits of years of tedious study and hard, unceasing labor began to ripen in the autumn sun of his bright and shining intellect, he was called from time to eternity. As a mechanic, both theoretical and practical, America had few his equal, and none his superior. His giant intellect; his readiness to disseminate his superior knowledge among his fellow-workmen; his genial nature and social bearing; his loyalty to our cause; his consistency as a brother member and the persistency shown in building up, perfecting and beautifying our organization, has endeared him to the heart of every member, and won for him a bright and shining reputation which will continue to grow brighter and brighter and throw out its brilliant rays so long as there is a single heart to beat responsive to the call of Brotherhood and Union.

His loyalty as an advocate of our common cause was not spasmodic in its nature, but it proceeded from pure and honest convictions, firmly rooted and intrenched within his manly bosom and generous heart. Wherever his lot was cast the seed of Union was scattered, and many have become converted under the benign influence of his convincing logic and sound teachings. In his Union he was to the members as a father, educator, protector and defender. On the floor of the convention of the International Union, which met in Louisville, Ky., in September last, where he attended as a delegate from District No. 12, comprising the cities of Bowling Green, Ky., Memphis, Nash-

ville, Jackson, Knoxville and Chattanooga, Tenn., and Huntsville, Ala., he proved himself a powerful reasoner, a lion in debate and a logician in the fullest sense.

Little did the members of the convention dream that he would so soon be called from time to eternity. Yet while his strong voice echoed and reverberated through the hall, even then the pale monster lingered about and singled him out as the first of those there assembled. In the performance of his duty he was stricken down by sickness from which he never recovered. Everything was done that mortal man could do, but all our efforts were thwarted by the ever beckoning hand of death. His time had come; he felt it; and although writhing in pain he retained his senses and courage to the last, when he finally succumbed to fate and calmly went to rest in the bosom of his God.

The Erring and Delinquent.

Mr. P. G. Simpson, ex-Treasurer of M. & B. Union No. 8 of Pa., (Pittsburgh,) is requested to turn over the funds in his possession belonging to the Union.

Mr. William Winchester, of Oshkosh, Wis., is informed that the sick benefits received from No. 4, on a lying certificate from a physician, and his ungrateful action afterward is not considered a square deal by honest men.

Mr. August Bursch, of Oshkosh, Wis., does not disseminate the very best odor on account of the way he got \$10 out of the Union and never showing himself afterward.

"Mischief Maker," of Indianapolis, we are informed is at his tricks again. We have been requested by over a dozen to give him a gratuitous boost into notoriety, which we decline to do, on account of the unimportance and smallness of the individual. Friend —, we can't afford to spend time cooking such small potatoes.

Notice to Subscribers.

Our subscribers will please bear in mind that the first number of the volume will hereafter make its appearance on the first day of January of each year, instead of November as heretofore. This change is made upon an official order from the convention of the Machinists and Blacksmiths' Union of North America. Meanwhile, we hope that each subscriber will go earnestly to work and contribute his mite toward increasing the number of subscribers, as we will make the JOURNAL just what the support it will receive will warrant. It must be borne in mind that mechanical engravings are very expensive and without them a mechanical publication is entirely deficient. It must also be borne in mind that in order to enable us to make the JOURNAL what it should be in a mechanical point of view, our subscription list must necessarily be large. We hope, therefore, that each friend of the JOURNAL will lend us his assistance in swelling its subscription list sufficient to enable us to make it the most interesting as well as valuable mechanical work in the world. The subscription price will be, as heretofore, \$1 per annum, notwithstanding the JOURNAL will be double its present size. The low price at which it will be sold alone should be an inducement for every machinist, blacksmith, boiler maker, pattern maker, locomotive, marine, fire and stationary engineer to subscribe. Let everybody subscribe who wishes to be informed in the theory of mechanism and who take pride in the promotion of the mechanic arts. All money for the JOURNAL must be sent by post office order, registered letter, draft or express. We shall not be responsible for any money lost unless sent as here directed. The expense of sending the same may be deducted from the amount sent. Address all letters to No. 88 Seneca street, Cleveland, Ohio.

Steam Boiler Makers and Pattern Makers.

The admission of steam boiler makers and pattern makers was submitted to a popular vote of our organization. It now remains with these men themselves to bring their influence to bear in favor of their admission if they desire it. It will require a two-thirds majority to alter the constitution and admit them. Since this question has been submitted to a vote of our members, we propose to leave the matter entirely in their hands. We shall speak neither for nor against the proposition until the matter is definitely settled; all we ask is a full vote. The time set by the convention on which the vote *must* be taken is on the first meeting night in December. A vote taken on any other night will not be valid. Therefore let every member devote one night at least to the interests of our organization by casting his vote upon the important question of the admission of steam boiler makers and pattern makers. Members should bear in mind that it is not proposed to take these men in a body, but to admit them, if found worthy, the same as machinists and blacksmiths are admitted.

Brotherhood of Locomotive Engineers.

The Grand International Division of the Brotherhood of Locomotive Engineers meets at Atlanta, Ga., this month. As this will be one of the most important conventions ever held by that organization, we expect much good will be accomplished.

Traveling Members.

Business throughout the country seems to be in a much worse condition to-day than it has been at any time since the panic occurred. There are no inducements at present, none whatever for our members to travel in search of employment, unless they have fair prospects before starting on a tramp; they will be the gainer, financially, if they remain at home.

Arbeiter Zeitung.

We call the attention of our German readers to the necessity of coming to the rescue and aid of the *Arbeiter Zeitung*, published in New York City. We understand that paper is struggling hard to maintain its existence. Like all workingmen's papers the class in whose interest it is published has not, at least so far, given it the support its bold and fearless advocacy for the rights of labor have merited. We have differed with the *Arbeiter Zeitung* on some points in the past, but we are convinced that it is a *bona fide* and unflinching champion of labor's cause, and for that reason we advise our German speaking fellow-citizens to come to its support in the hour of need. The *Arbeiter Zeitung* is the only paper published in the United States in the German language devoted exclusively to the interests of workingmen. It has been in existence nearly two years, and if the proper support is extended it will be a permanent advocate of the rights of those in whose immediate interests it is now published. It is published weekly at a subscription price of \$2.50 per annum, or 65 cents per quarter. Address *Arbeiter Zeitung*, 113 Chrystie street, New York City.

Mode of Setting Eccentrics.

Charles Randall, of Amboy, Illinois, under date of October 8, writes us the following note: "I would like to ask Mr. Illingworth to give us, through the JOURNAL, the mode of setting eccentrics on the shaft with stationary link. Roper, in his hand book, says: 'The linear advance of the eccentrics, with the stationary link, is always less than that of the valve, and is effected by the length of the eccentric rods.' I should be very much pleased if Mr. Illingworth would explain the above. I am a regular subscriber for the JOURNAL, and think the mechanical and scientific articles from Mr. Illingworth are worth more than double the price of subscription."

Political.

Bro. Jackson H. Wright, recently a candidate for the legislature of Indiana, writes, "we have met the enemy and we are his'n." Brother Wright came within 196 votes of being elected.

Jonathan C. Fincher is a candidate for the legislature of Pennsylvania. If he was still in the labor harness we could with certainty predict his fate. Workingmen do not as a general thing vote for one of their own number.

Information Wanted.

If our members and those who are readers of the JOURNAL would send us marked copies of papers from their respective localities containing articles of interest to workingmen, we could make the JOURNAL still more interesting. Send us the news, and we will give our readers the benefit of all that we find interesting.

An Argument in Favor of Union.

In the city of Cleveland there are in the neighborhood of eight hundred machinists and blacksmiths; over five hundred are members of our Union; about three hundred are not. The police records for 1873 show thirty-seven arrests of machinists and blacksmiths, all of whom were furnished by the three hundred outside of our organization. Not one of the five hundred who are members was arrested. Moral: join the Union and become good citizens.

The Late Henry M. Lawlice.

In our last issue we asked for the friends or relatives of Henry M. Lewis,—it should have been Henry M. Lawlice,—who died at Elkhart, Ind. His home was in Paterson, N. J., where he has a brother, Thomas Lawlice, who works at the Rogers Locomotive Works. The relatives of Henry can obtain particulars of his death by addressing Mr. Francis Colman, Elkhart, Ind.

Miscellaneous.**THE WORKINGMEN AND THE EMPLOYERS.**

We would not knowingly say one word that would tend to increase animosity and bitterness between the employers and employees of the iron and steel works of this city. And yet last week when the puddlers, some 300 to 400 in number, sent a respectful request asking that their employers should meet them and calmly and amicably talk over the subject of wages, each making mutual explanations, we think the employers were wrong, were more nice than wise, and were altogether too cranky, in refusing to meet their employees as they were invited to do. Look at the case: Here were several hundred employees whose wages had already been reduced and reduced until they were lower than in any other place in the United States, except Scranton, for the same kind of labor, and they were told that their wages were to be again arbitrarily reduced. No explanation was given of the causes for such reduction, other than a sort of vague general statement that the price of the manufactured iron did not justify a higher rate of wages than the scale proposed. The workmen were not even notified of the extent of such reduction when they asked for such conference with their employers. They were not consulted as to the terms, the causes, the reasons for such reductions. All they knew was that they had been notified that on a certain day their wages would be arbitrarily reduced, and that on a certain day before that time a scale of the rate of wages to be fixed by the employers would be hung up in the mills for the information of the workmen. No consultation, no conference, no explanations. The scale of prices of labor would be hung up in the mills as fixed by the employers, and the workmen could take these wages as fixed by the employers, and in fixing which the workingmen had no voice, and the employees could work for the wages thus fixed or not, just as they pleased. Very naturally the men asked for a conference, inviting their employers to meet them and give them reasons for such reduction. And this simple request the haughty employers refused!

What meat hath these our Cæsars fed on that they have grown so great? Do they forget that the lordly dwellings, the broad expanse of mansion grounds, the carriages, the horses, the luxuries that surround them—their mammoth manufacturing establishments which have turned out hundreds of thousands of dollars of profits in good years—were all acquired by their fathers out of the profits of the sweat and labor of these bronzed and smoky workmen to whom they now refused a solitary word of explanation when chopping down wages to a starvation point? Here were puddlers paid in Pittsburgh last summer \$7 per ton, now \$6 per ton, reduced in this city from \$4.80 to \$3.75 per ton, and the average of other workmen to \$10 or \$12 per week, while the poor laborer was struck down from \$1.37½ per day to \$1.20 per day, and when these employees thus cut down simply invited their employers to meet them and confer on the subject they were met with a prompt refusal on the part of the employers! These blooded lords of the iron mill don't give reasons to men who make their fortunes for them! By no means!

"Ill fares the land to hastening ills a prey
Where wealth accumulates and MEN decay!"

Here were laborers brought close up to a hard winter, already idle through the best part of the year, with wives and families and little ones dependent on them for food and clothing, their wages already cut down to \$1.37½ per day, now cut down again to \$1.20 per day, and when these poor workmen in a kindly spirit ask for a conference with their employers on the subject, they are grandly refused! The practical answer of the employer is, take what we choose to give you for your labor or starve! We won't explain. We won't talk it over amicably—we won't have any talk on the subject. In just such lack of courtesy and absence of good feeling and friendly intercourse do the labor troubles of the country, and strikes in most cases, have their origin. The employers make a yawning gulf between themselves and their workmen. The employer, already grown rich from the labor of his workmen, has an abundance to live on in luxury and ease during the dreary winter, whether his mills run or not. But to the poor laborer, with half a

dozen little mouths to feed, and little feet to shoe, and little limbs to be warmed with fire, and housed with shelter, the \$1.37½ cents per day in wages is his all, his main reliance, his hope, his every strength to keep the wolf of starvation and death from the door! And when his wages are cut down arbitrarily to \$1.20 per day, and he is even threatened with the loss of that, and he humbly asks his employer to amicably confer with him on the subject, and give him reasons therefor, we say that the employer who refuses thus to meet his workmen and frankly explain why no higher wages can be paid, hasn't a spirit inspired by the kind of humanity that we most admire. A courtesy of this kind extended from employer to employee does not hurt the employer any, either in purse, or in the estimation of a discriminating public that finally comes to estimate every member of the community justly. We don't feel proud that manufacturers, whose enterprise and energy we have often had occasion to praise and commend, have in this instance shown such a lack of courtesy, kindness and good feeling toward hard-handed and hard working employees, whose labor has piled up massive fortunes for their wealthy employers.

And now having started on the subject, we are tempted to say some other words unpleasant to employers, and we do so in no unfriendly spirit toward them. We don't believe they are dealing with their employees on a right plan. Mr. Harris, President of the National Association of Puddlers, said at the Troy meeting last week:

"In relation to wages under the reduction, he thought there was but one other place where they were as low as in Troy, and that was at Scranton, Pa. The men there had been forced to suffer reduction after reduction. He was sorry that the meeting Wednesday afternoon was a failure, and said that in Pittsburgh, Pa., the manufacturers are willing to meet the men and discuss all questions upon which there are differences of opinion. There has not been a strike there since 1867, for the reason that since that time (when there was a strike lasting seven months), they have had a scale of prices regulated by the price of iron, and consequently there was no cause for a strike, for when iron

went down the men expected a corresponding reduction, and when it advanced they were certain of having their wages advanced. There will always be trouble, he says, at Troy, or anywhere else where there are large iron interests, unless employers and employees unite on some uniform scale of prices and have a system about the work. This scale of wages the employees are anxious to have adopted in Troy, as all further trouble would thereby be avoided."

Now that strikes us as a very sensible proposition, and we can't but believe that the Troy iron masters have made a mistake in refusing to meet their employees and adjusting the scale of wages on the Pittsburgh plan. Nothing can be fairer than that. When the prices of iron are down to starvation prices then down go wages to low water mark, and when prices are up wages go up in the same ratio in the scale. We should be glad to hear what objection any Troy iron master could have to the sliding scale of wages prevailing in Pittsburgh.—*Troy, (N. Y., Daily Paper.*

TEST OF STEAM BOILERS.

A special trial of the strength and other qualities of boilers and engines is to be made at the exhibition of the Franklin Institute, in Philadelphia, in order to test the comparative merits of those on exhibition. Steam boilers are to be tested by a board of experts by what now is known as the "evaporative test," that is, by determining the amount of water that each evaporates per pound of coal consumed. A decision based on an experiment of this kind, and by parties who have their reputation as experts at stake, will create a sensation among makers of boilers, especially those who have patented articles. We understand that all the leading makes are represented, and each of them is confident of coming out ahead. Success under these circumstances means a fortune, for economy in fuel, combined with safety, is the thing sought after in steam boilers.

Who is the laziest man? The furniture dealer; he keeps chairs and lounges about all the time.

CO-OPERATION IN GREAT BRITAIN.

The number of co-operative trade societies in England and Wales, according to a recent parliamentary return, is 746, with a membership exceeding three hundred thousand, and a share capital of nearly fifteen million dollars. The annual business of the societies amounts in payment of upwards of fifty million dollars in gold, and in receipts to nearly fifty-seven and a half millions, the net profit from all sources being in round numbers four million dollars in gold.

In a long discussion of the principles and prospects of co-operation, published in the *Contemporary Review*, Mr. Thomas Brassey, M. P., mentions these enormous sums as convincing proof that the principle is convenient and practicable in its application to the distribution of commodities; and what is more important, the working of the system is the source of considerable profit.

On the other hand, the fact that the annual withdrawals from the societies are half as many as the additions would seem to prove that the management of co-operative stores is not without serious difficulties, which will have to be removed before the plan can be pronounced perfectly successful.

Still more difficult are the problems to be solved in the matter of co-operative production, the societies of this sort being few, and the failures more numerous than the successes. Among the successful are the Paisley Manufacturing Society, the Hebden Bridge Fustian Society, the Eccles Quilt Manufacturing Society, and the Lurgan Damask Manufacturing Society, all small establishments whose success is probably due in a great measure to the wisdom of the promoters in not attempting their operations on too ambitious a scale. Still the flourishing condition of the Manchester Printing Society shows that a large undertaking can be conducted on the democratic system, certainly where the range of production is limited, and individual exertion on the part of the workmen is of more account than of great executive skill at the head. The Co-operative Printing Society, recently established in London, however, has not turned out so well.

The most important experiment in co-operation production thus far attempted in England is that of the Ouseburn En-

gine works. Its experience has not been favorable to the system when applied to varied and complicated undertakings. Great difficulty has been experienced in dealing with the different classes of workmen, and in the adjustment of rates of wages. Men brought up to one trade naturally find it hard to estimate the dues of those practicing an entirely different trade; and when they are required to assign higher wages than they can hope to receive, to men whose superiority they are unable to appreciate, the difficulty becomes almost insurmountable. The practical result in the Ouseburn Works has been a strike for higher wages in one of the departments—one of the evils which co-operation was specially expected to prevent. The society also suffered severe losses through mismanagement, the taking of orders at too low a price, and other errors, due to lack of technical and practical knowledge on the part of their chief adviser, who was more of a philanthropist than a man of business.

As in other countries, so in England, success in co-operation seems to be limited to moderate undertakings. When the business is of a kind that cannot be carried out advantageously on a modest footing, the co-operative principle is best applied to the execution of parts of the work; in this way the system can be made available in the largest undertakings, after they have been suitably subdivided, the general administration remaining in the hands of an individual owner or company.

As Mr. Brassey observes: Where no special personal influence is needed for the purpose of securing clients and customers, and where the internal economy of the establishment can be conducted by a regular routine, there will be no disadvantage in the management or a board or council. But when transaction can be completed without long and difficult negotiations; when an undertaking is of a kind that cannot be deducted in accordance with fixed rules, and the emergencies which must, from the nature of the case, arise are always unforeseen, and must be met on the spot by an administration upon whose skill and conduct all will depend; in such a case the co-operative system pure and simple becomes impossible, and the attention of masters and workmen wishing to work together in a friendly alliance should

rather be employed to devise schemes whereby the equitable distribution of profits among the workmen may be combined with the necessary concentration of authority in their employer.

Perhaps the most noteworthy alliance of this sort is that in connection with the collieries of Messrs. Briggs. To avoid, if possible, the delays and losses incident to strikes, this firm voluntarily took their miners into partnership some years ago, dividing the profits above a certain amount annually among the workmen, in proportion to their several earnings. Last year nearly seventy-five thousand dollars in gold were so distributed as the workmen's share of the profits, several receiving as much as thirty pounds (\$150) each. About half of this sum has been returned to the company in premiums on shares applied for by the miners. Inasmuch as the owners receive as high a rate of interest on their investment as they had ever made in their best years before the workmen were given an interest in the profits, while the risks and annoyances formerly arising from the strikes and labor quarrels are entirely avoided, it is clear that the alliance is mutually beneficial to all concerned.

The experience of Messrs. Fox, Head & Co., who adopted a similar plan eight years ago, has been quite as favorable to this mixed system. Their plan secures to every person a pecuniary interest in the success of the business, as far as possible in proportion to his services. Every one engaged, whether as a laborer, clerk, foreman, manager or partner, is paid at the rate customary in the district for his particular work. The capital employed is remunerated by the specified rate of interest. Provision is made out of the profits of manufacture for keeping the works in repair, and to cover renewals and depreciations, and a fund is maintained as a provision against losses by bad debts. This done the surplus profit is annually divided into two parts; one to be paid to the capitalist, the other to be divided among those employed, in proportion to their earnings. The sums already divided among the workmen amount to about thirty thousand dollars. A superior class of workmen are secured, and they stay longer at the work than ordinarily.

MAKING HORSE SHOE NAILS.

Horse shoe nails are made from iron imported from Norway. It comes in short bars, perhaps four feet long. It is heated in a furnace till almost at white heat, then rolled between two huge iron or steel-faced rollers till it resembles a strip of iron pie-crust, smooth on the bottom, but in billows or little waves on the upper surface. After being rolled to the required thinness, the iron is by machinery cut into pieces four or five inches square. These flat pieces or strips are then placed under a cutting die, which at every impression stamps out several nails, the head of each being from the thick, and the point from the thin end of the slip. These nails in the rough are then taken to a room where are at work a number of boys about ten years old, who sit at a table with a revolving rod about four feet long and two inches in diameter, before them, driven by machinery. This rod is cut or grooved like an auger, or a continuous screw. Into the cut-away part the rough nails are dropped, points down, by the boys. The opening is just large enough to let the nail in easily, the head of it keeping it from dropping through. As this rod revolves it constantly works the nails off to the right and into a box which catches them as they are worked out, but not till some steel hammers or knuckles have managed to hit each nail on its sharp end and properly point it, so that it can be driven into the hoof of the horse and be made to cut out before it touches the quick. One boy will feed into this pointer six hundred pounds of nails in ten hours. Once in they are worked out—carried along by the revolving screw.

From here they go into an iron drum filled with sawdust, and are churned around right lively by machinery till the dirt and grease is all cleaned from the nails, when they are again placed in a drum, and rolled or rattled together till they are quite bright and smooth. Then they are taken to another room and piled on benches before a number of little girls, from six to ten years old, who, with nimble fingers, keep drawing toward them nail after nail, turning them to see both sides that each nail is perfect at the point. After this inspection by girls, the rapidity of whose work

is astonishing, the nails are ready to be put in kegs, weighed, and sent to market. They find market with blacksmiths or horse shoers in all parts of the country, from Maine to California.

The scraps of iron left after the nails have been stamped out, are by powerful machinery packed into bundles not so large as a four quart measure, heated and rolled into bars from which steel is eventually produced.

The machinery used in making these nails is not exhibited to nail makers, so, to confer a favor on boys in blacksmiths shops, anxious to enter the business, we will tell how it is constructed. A powerful trip hammer, operated by rotary motion, vibrating with centrifugal force, subsidizes the bewildered metal before it is naturalized, and holds it in place on a planular epoch, firmly embedded by suspension and coherent gravitation. Attached to this epoch are numerous triangular dics and rectangular hipsikeezles, bifurcating from the diametric core, and converging about the radient of the duplex elliptic, working a left-handed eccentric rolling under a cam joint. This pressure brought to bear directly upon the tripartite nolhemus of the periphery of course the power obtained is equal to the reduction of ore in the flue, and thus the point of the nail is sqegeed at one turn of the upsetting knnckle. All that now remains to be done is to inspect and find a market.—*Pomeroy's Democrat.*

THE DECLINE OF MECHANICAL SKILL.

Twenty-five years ago surfaces of wood were made smooth and exact by a plane in the hands of a mechanic. The same is true of surfaces in metal, except that the instrument was a file or chisel. Great works were impossible, except at a heavy cost; and a contract that would be a mere trifle in these days was a serious undertaking, for it involved calculations as to the number of men who had sufficient manual dexterity to be intrusted with the work. In reducing the valve seat of a steam engine, for instance, to a plane surface, a few too heavy blows on the chisel would render additional labor necessary, adding much to the cost.

The circumstances of those times produced good workmen. They made mechanics in every sense of the word, men

of ample experience and high intelligence, familiar with all branches of their business, and able to execute one detail or the other with equal facility.

Through the introduction of automatic machines, which only require to be set in motion to produce certain forms, manual dexterity is no longer a prime requisite, and as a consequence versatile mechanics are scarcer every year. A prominent man remarked to us recently, "I can take all the so-called carpenters in this town, and out of the hundreds not find a dozen who understand their calling in all details, and can estimate for a contract." Persons having work done in country towns may be able to verify this statement from their own experience. Work which was to have cost a certain sum has exceeded it enormously. The reason is in the fact that the men were ignorant of their business and guessed where they should have calculated.

Machines reproduce certain forms with far greater accuracy than the hand can do, and with much more rapidity. The result is advantageous to society at large, the workman included, but it is destructive to manual dexterity as applied in the arts. The abolition of the apprentice system has also much to do with this condition of things. When a young man served seven years at his trade he was fitted to undertake journey work at the end of the time, receiving a journeyman's pay; but the system having fallen into disuse, no fixed time being required in most cases, or no penalties attaching if the time agreed upon verbally is not adhered to. Young men become restless, and leave after acquiring a mere smattering of their handicraft, and go to seek their fortunes. The result is that the workshops are full of men who can do certain lines of work and no others, and manual skill in the use of all tools, with all that it involves, is no longer common. Many who are out of employment at dull seasons have only themselves to blame for it, for they have failed to become adepts, because they have learned only such portions of their business as would enable them to fill supernumerary places.—*New York Sun.*

EMPLOYERS AND EMPLOYEES SHARING PROFITS.

There are employers in France, as well as in England, who have formed the idea of admitting their employees to a share in the profits. Foremost among societies formed in this way is the association of LeClair & Co., Paris. A good many years ago M. Leclair was greatly troubled with strikes and insufficient work, and decided to excite his men's good will by giving them a share in the business. He promised then half the net profits above a certain sum. Each man then received a dividend in proportion to the wages earned during the year. The results of this action are most happy—no strikes, careful work, good habits and greater profits. The business is so large, indeed, that besides the annual dividend of from 15 to 18 per cent., there is also a pension of \$160 for each member over fifty years of age. In 1848 several hundred journeymen piano makers filed a request for \$60,000 of the Assembly's loan. This exorbitant demand was refused, and their plan broke down. About fourteen however, united and opened business on March 18, 1849, with \$400 worth of tools and \$46 in cash. On the 4th of the following May the members received their first wages, amounting to \$1.37 each. Each took the dollar, but the 37 cents were invested in a "fraternal repast," which the fourteen members, with their wives and children, enjoyed in all good fellowship. For a month wages were a dollar a week. Then they sold a baker a piano for \$96 worth of bread. By August their weekly wages rose to \$2, to \$3, to \$4. More than half their profits were devoted to capital account. In December, 1850, their capital was \$6,586. Since then they have been successful, but apparently not as fraternal. The company has split into two, one of which has a capital of \$40,000. Of all societies formed by French workingmen, perhaps the most interesting is that of the tailors. A dozen or so Parisian journeymen thrown out of work by the Franko-German war, clubbed their needles and scissors, and opened a little dingy room on a dingy little street. Their excellent work gave them the means of supporting life—but that was all. When, however, the Government of National Defense advertised for con-

The proposed tunnel under the Niagara river is to be twenty-nine hundred and forty feet long.

tractors to make clothing, the tailors' society bid low and got the job. To execute it, they hired nearly 35,000 people, chiefly the wives of men in the army. They gave some of these subordinates shares in the profits, and paid all of them far higher wages than any other employer in the city dreamed of giving. Nevertheless the profits of the contract were \$42,000. This sum was divided among all the members in proportion to the time each had worked. The society now occupies handsome quarters, and does a handsome amount of work. A "fraternal building club," formed of journeymen carpenters and masons, built one of the largest depots in Paris, a few years ago, and got \$750,000 for its work.—*Cor. Chicago Tribune.*

MODERN CAST IRON.

The Philadelphia *Trade Journal*, in an editorial on improvement in cast metals, recapitulates the advantages gained by the modern scientific manipulations of cast iron, in a concise and forcible manner. In the past forty years the gross weight of our cast iron articles has been diminished fully one-half. Half a century ago the iron frame of a Washington printing press weighed nearly 1,000 pounds; and although it was an arch of metal nine inches wide by three inches thick, so poor was its quality that it was often broken by the pull of one pressman's arm. Our present smooth light castings show an actual elasticity under strain which approaches the service of wrought iron, allowing a large reduction in weight of metal and in the consequent expense.

Why is a pig a good mathematician? Because he is good on the square root.

Why is a convalescing dyspeptic like a reprieved criminal? Because he can't digest yet.

What would a school master do if all his pupils left him? Do you give it up? So would he.

A Kentucky lady "gently strode into the dark cave of eternal night at half-past six in the morning." Tough luck.

"Can't they train Chinamen to eat grasshoppers?" is the conundrum propounded by interested parties in the West.

ITEMS OF INTEREST.

A national convention of miners will be held in Cleveland, Ohio, on Tuesday, October 27th.

The rolling mill at Glasgow, near Pittstown, began operations on the 28th of September.

The coal miners of Pekin and Colchester, Illinois, are on a strike for an advance of wages.

Fourteen hundred men have recently been discharged from the shops of the New York Central Railroad.

All the rolling mills and blast furnaces in Cleveland, including Newburgh, are now running, mostly single turn.

Two furnaces of the Lackawanna Iron and Coal Company's rail mill, of Scranton, Pa., commenced blowing a few days ago.

The Joliet Iron and Steel Works will soon resume, the financial affairs of the company having been satisfactorily adjusted.

The heaters in the Allentown Rolling Mill are on a strike against a reduction of fifteen per cent. in their wages, thinking it too great.

Silk manufacturing is being prosecuted successfully at Scranton, Pa., while at Paterson and elsewhere the industry succumbed to the panic of 1873.

A veteran housekeeper affirms that the scarcity of good servants is largely attributable to the scarcity of mistresses who know how to keep house as one should be kept.

Michigan's thirty-two charcoal blast furnaces are nearly all blowing. These furnaces, with three coal and coke, and one anthracite furnace, have a daily capacity of about 1000 tons.

A carriage factory, to be managed on the co-operative principle, has just been established at Cedar Rapids, Iowa. Each workman shares equally in all gains or losses. It is called the Excelsior Carriage Manufacturing Company.

Says Bulwer Lytton: "We should provide for our age, in order that our age may have no urgent want of this world to absorb it from the meditation of the next. It is awful to see the lean hand of dotage making a coffer of the grave."

General Correspondence.

In order to insure insertion, all letters intended for publication, must be accompanied by the full name of the writer, not necessarily for publication, but as a guarantee of the good faith of the writer.

Correspondents will please send in their manuscripts on or before the 12th of each month, so as to avoid being crowded out.

READING, P.A., Sept., 1874.

MR. EDITOR—Not being able to find any rule, in either Haswell or any work of the kind, to construct cone pulleys of different sizes by, and being unable to discover any rule in my own experiments, I have at last concluded to appeal, through the JOURNAL, to Mr. Illingworth, whose excellent articles in the JOURNAL I have been reading for several years, hoping he will be kind enough to give me the desired information.

Fraternally, P. H. BENADE.

WILMINGTON, N. C., Sept., 1874.

WILMINGTON, N. C., Sept. 18, 1871.

MR. EDITOR:—Allow me to suggest an idea for the thoughtful consideration of all our members, and one which if carried out would undoubtedly add at least 20 per cent. to our membership. Let us establish a free school for the orphan children of our deceased members. The school to be under the control of the I. U., and three trustees, to be elected at the I. U. Convention. It should have at least ten acres of good land, be centrally located, where the necessities of life are cheap, water good, etc. The children could work at least three hours daily on the land, raising vegetables, etc., for the use of the school. This amount of labor would not only be healthy exercise for them, but would be contributing to their support. Clothing medical attendance, etc., to be also furnished free; every child to have at least three years' benefit of the school free of charge; this would give them the rudiments of a good English education. The principal should be an elderly gentleman, his wife the matron and his daughter or daughters assistants. He should be a philanthropic man who would take a fatherly interest in the children, his salary to be nominal at the beginning and increased as the institution progressed. A school of this kind would advance the interests of our organization beyond anything we could attempt, and could be

easily accomplished by the I. U. levying a tax of say ten cents semi-annually, to be paid when the semi-annual bills are paid. Every right thinking member would willingly pay an amount so small for such a purpose. Now Mr. Editor let the I. U. buy ten or twenty acres of good land in the middle states, build a good, plain frame dwelling on it for the present, levy the tax, collect the money, secure the teacher, appoint a committee in each Union to hunt up the children and send them on, and we are ready for operations. Then we will have a banner unfurled to the breeze, upon a staff as high as heaven, around which every workingman in this broad free land of ours will rally and lend a helping hand in the grand work of providing for those helpless ones that which they are now deprived of—education. They would grow up to manhood and womanhood and call us blessed. Let us try this scheme, it will pay, and let us remember that God pays the interest on every cent so invested. Let us try it, and in a few years we will have something that all will be proud of.

Respectfully,

JAMES W. WINN.



YOUNG—LEMON—In Martinsburg, W. Va., August 18th, 1874, the Rev. Mr. Ockermann, Bro. John Young, formerly of No. 11 of Indiana, to Miss Esther Lemon.

TAVENER—SMITH—In Jackson, Mich., by the Rev. C. I. Deyo, Brother Frank Tavener of No. 5 of Mich., and Miss Evangelia Smith, of Jackson.



ASHURST—In Oil City, Pa., August 29th, 1874, Bro. Charles Ashurst, of No. 6 of Pa.



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HEYD—In Detroit, Mich., on Sept. 14th, 1874, Bro. Henry Heyd, ex-President of No. 2 of Mich., aged 28 years. Buried in Brantford, Ont.

RAMMING—In St. Louis, Mo., Aug. 16th, 1874, after a long sickness of summer complaint, Katie, only child of Bro. John Ramming, Cor. Sec. of No. 7 of Mo., aged 10 months.

KLEIN—In Detroit, Mich., August 29th, 1874, Bro. John G. Klein, ex-President and late Rec. Sec. of No. 2 of Mich., aged 25 years and 9 months.

DETROIT, Aug. 31, 1874.

MR. EDITOR—I am instructed by No. 2 of Mich. to send you notice of the death of ex-President and late Rec. Sec. Bro. John G. Klein. He was one of our most intelligent and valuable members, and if you will give a notice of his life and death, and publish the following resolutions in our *MONTHLY JOURNAL* No. 2 of Mich. will consider it a favor. We are aware that it is not customary to publish the resolutions in the *JOURNAL*, but in the death of a prominent member we feel justified in making the request. Bro. Klein has been a member of 2 of Mich. for ten years; his record and character have always been of the highest order. As President of this Union he was an able officer and a strict disciplinarian; as a Recording Secretary he had few equals and no superiors. His funeral was attended by the members of No. 2 of Mich., eight lodges of Odd Fellows and one encampment. It was the largest turn-out ever given to a member of this Union. Bro. Klein was for a short time a member of No. 7 of Ill., (Peoria). While living there he married an estimable young lady of that city, whom he now leaves a widow with a son two months old. He was a member of the Insurance Department. His illness had been for only four weeks.

The following resolutions were passed by No. 2 of Mich.:

WHEREAS, It has pleased Almighty Providence to take from our midst our friend and brother, John G. Klein; and

WHEREAS, The solemn duty rests on us as brothers under the common bond of benevolence to express the sorrow we feel in the untimely loss of our departed brother: therefore be it

Resolved, That we bow in humble submission to the Divine Authority who has been pleased to call suddenly from

this world of perplexities and cares unto the better and happier sphere our beloved brother.

Resolved, That in the death of our brother, John G. Klein, this Union has lost a most worthy and esteemed member, and his fellow-workmen a sincere and devoted friend.

Resolved, That we tender to the bereaved family our heartfelt sympathies, and pray that Almighty God may heal the wound he gave, and bring consolation to their sorrowful hearts.

Resolved, That as a token of respect to his memory, our charter be draped in mourning for the space of thirty days, and a blank page be kept in our minute book.

Resolved, That a copy of the above resolutions be sent to his bereaved family and published in the *MACHINISTS AND BLACKSMITHS' JOURNAL*.

I remain, yours fraternally,

SYLVESTER GREUSEL,
Cor. Sec. No. 2 of Mich.

ROWNTREE—At Chattanooga, Tennessee, on the 30th of September, after a short but severe illness, Bro. William Rowntree, of No. 5 of Tenn., aged 37 years.

CHILLICOTHE, O., Oct. 4, '74.

At a meeting of M. & B. Union No. 7 of Ohio, the following preamble and resolutions were adopted:

WHEREAS, Death has taken from our order one whose ardor and zeal for the good of our cause has endeared him to us, as our first officer and instructor while a member of No. 7; and

WHEREAS, Having left us to better his condition, and joined No. 5 of Tenn., and who, while in the discharge of his duties as district delegate, has been stricken by the hand of death; therefore be it

Resolved, That as a token of our deep respect for the memory of Bro. William Rowntree the charter of our Union be draped in mourning for thirty days.

Resolved, That a copy of these resolutions be sent to the widow of our deceased brother; also that they be published in the M. & B. JOURNAL.

JAMES HEANEY,
JEREMIAH FERNALD,
ALEX. A. DIFFEY,
JOHN A. KLUNK, } Com.

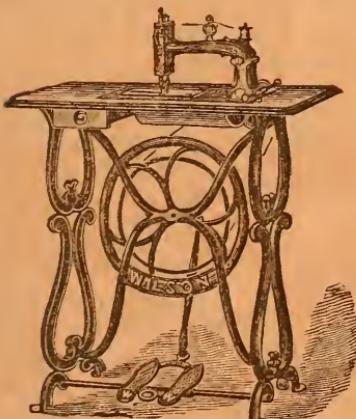
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